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August 25, 2023

RE: Bennett, Kirt
DOB: 08/19/1965
DOA: 07/25/2022

07/25/2022, East St. Louis Police Department, Incident Report.
Reporting Party 1: Curtis Williams. Vehicle 1: 2015 Nissan Murano; Owner: Vickie & Curtis Williams.
Reporting Party 2: Kirt Bennett. Vehicle 2: 2016 Chevrolet Equinox; Owner: Theresa & Tod Roberson.
Incident Narrative: At 2:00 p.m. on 07/25/2022, Sergeant Henson of ESLPD was approached by a male subject, later identified as Curtis Williams (Unit 1), while at 301 River Park Drive ESL. Williams advised that he had just had an accident with another vehicle and both vehicles were on the police parking lot. Reporting officer met Williams on the parking lot along with Kirt Bennett (Unit 2). Bennett introduced himself and advised he was the driver of Unit 2. Reporting officer spoke with both drivers of Units 1 and 2. Unit 1 stated the accident occurred at 1:45 p.m. on 07/25/2022 in the 100 block of East Broadway, ESL. Unit 1 (Williams) was traveling east in the left lane and changed over to the right lane and crashed into Unit 2, which was in his blind spot also traveling eastbound in the right lane. Unit 2 (Bennett) confirmed the statement to be accurate. Unit 1 and Unit 2 appeared to be okay and medical attention was not rendered. Reporting officer observed that Unit 1 had front passenger side quarter panel damage along with the front passenger side rim and bumper area. Unit 1 reported no other damages at the time. Unit 2 was observed to have damage to the driver side front quarter panel and both front and back doors on the driver side. Unit 2 reported no other damages at the time. Both parties were advised that since the report was not taken at the scene, no diagram of the crash would be made, only an incident report indicating their statements would be on file. Both parties reported no other occupants in their vehicles.

07/26/2022, BJC HealthCare, Memorial Hospital Shiloh, Emergency Department. Meghan Boitnott, RN. 11:50 a.m. Patient was the restrained driver of an MVC. His car was impacted on the back driver side door going approximately 30 mph. He is

complaining of low back pain and right ankle pain. Denies airbag deployment. Accident happened last night.
Emily Fuhler, PA. 12:01 p.m. Same history is taken. "He does not believe he hit his head, unsure with loss of consciousness. No other significant health conditions, does not take a blood thinner. . . . He did have headache last night, denies at this time." He is having pain to his mid and low back as well as right ankle. Hs not taken anything for pain today. Physical Examination: Msk: Cervical, neck supple. "No significant tenderness with palpation of right ankle, no pint tenderness of thoracic or lumbar spine. Neurologic: General, **No focal deficit present**. Gait normal. Alert and oriented x3.

07/26/2022, X-ray lumbar spine two to three views, Memorial Hospital Shiloh, Brendan Calhoun, MD. Radiology Report. Multilevel DDD with minimal height loss and small anterior spurs. No fracture or worrisome bone lesion. No listhesis. No other significant finding. Impression: No acute radiographic abnormality. Mild degenerative changes.

07/26/2022, X-ray thoracic spine three views, Memorial Hospital Shiloh, Brendan Calhoun, MD. Radiology Report. Multilevel mild to moderate disc height loss most pronounced in the midportion of the thoracic spine. No hardware in the spine. Impression: No acute radiographic abnormality. Mild degenerative changes and slight leftward curvature of the thoracic spine.

07/26/2022, X-ray right ankle three views, Memorial Hospital Shiloh, Brendan Calhoun, MD. Radiology Report. Impression: No acute osseous abnormality.

07/26/2022, CT head without contrast, Memorial Hospital Shiloh, Jason Carmichael, MD. Radiology Report. Impression: No acute intracranial process.

07/26/2022, BJC HealthCare, Memorial Hospital Shiloh, Emergency Department. Emily Fuhler, PA. 1559. Comment: Normal x-rays. No acute osseus abnormalities. No abnormal findings on CT of the head. Patient states symptoms have improved, medications given in ED. Discussed Ace bandage for right ankle, does not want this at this time. Discharged home with prescription for Toradol, lidocaine patches, and Flexeril for symptoms. Follow up with PCP.

07/28/2022, Initial Evaluation. Subjective: Patient presents to office "for injuries sustained in a motor vehicle collision on 07/26/2022 at 2:30 p.m." *[sic]* He was the driver of a midsized SUV. The other vehicle involved was also a midsized SUV. The patient states he was traveling and was struck in the driver's side. The patient's vehicle was traveling about 30 mph. The approximately speed of the other vehicle was unknown. They, however, were both proceeding with the flow of traffic. *(We may reasonably assume that they were both traveling at the same velocity.)* Patient states that emergency personnel did arrive at the scene. *(There is absolutely no report of such.)* Assessment:

Posttraumatic headache. Cervical disc displacement. Cervical radiculopathy. Sprain of cervical ligaments. Strain of cervical muscle, fascia, tendon. Sprain of thoracic ligaments. Strain of thoracic muscle, fascia, tendon. Lumbar radiculopathy. Lumbar disc displacement. Sprain of lumbar ligaments. Strain of lumbar muscle, fascia, tendon.

08/05/2022, MRI cervical spine, Greater Missouri Imaging, Matthew Ruyle, MD. Radiology Report. Findings: Kyphotic angulation at C3-4. Alignment is otherwise anatomic. No spondylolisthesis. Congenital/developmental central canal stenosis is observed at each level C3-C7 due to short AP neural arch formation. This contributes to degrees of stenosis. T2 hyperintense cord signal focally at C3-4 interspace and minimally at C4-5 may represent contusion or myelomalacia. Predominantly within t he white matter tracts, likely indicating myelomalacia. C2-3 normal, no bulge or protrusion. C3-4 caudally extruded disc material on the right and minimal caudally extruded disc material on the left resulting in ventral cord flattening and moderate central canal stenosis. Annular tears/fissures observed. *(Inappropriate use of the word tears as recommended in **Lumbar Nomenclature 2.0.**)* C4-5 midline disc herniation of 4-5 mm with annular tear/fissure superimposed upon circumferential disc bulge. C5-6 midline broad-based 1.5 mm protrusion resulting in dural displacement but no stenosis. C6-7 and C7-T1 normal disc hydration and signal characteristics. No bulge, protrusion, facet arthropathy, central canal or foraminal stenosis.

08/05/2022, MRI lumbar spine, Greater Missouri Imaging, Matthew Ruyle, MD. Radiology Report. Impression: L3-4 circumferential bulge with left foraminal tear and herniated/cranially extruded disc fragment resulting in severe left and mild right foraminal stenosis but no central stenosis. L4-5 circumferential bulge with left foraminal to far lateral herniation with annular tear/fissure resulting in moderate to severe left and right foraminal stenosis but no central stenosis. L5-S1 left paracentral annular tear/fissure and broad-based resulting in moderate left greater than right foraminal stenosis and left lateral recess stenosis but no central stenosis.

08/11/2022, Touchette Regional Hospital, Ronald Hublall, MD. Examination: Barium Swallow. Reason: Dysphagia. Findings: Lack of inversion of the epiglottis with all consistencies of barium that were given. Minimal bone spur at C4-5 that does not appear to cause obstruction. Incomplete clearing of the bolus in the distal esophagus can be seen with GERD or diminished peristalsis.

08/11/2022, Laura Lake, MS, CCC-SLP. Speech Language Pathology Note. Modified Barium Swallow Study. Mild OP phase dysphagia characterized by absence of epiglottic inversion and decreased laryngeal elevation. No aspiration noted. Deficits are surprising considering the patient's age and otherwise good health. His body is compensating to allow protection of the airway with low to no aspiration risk.

08/24/2022, Mark Belcher, MD, Gateway Spine & Joint. Chief Complaint: Low back pain. Neck pain. Patient in MVC on 07/25/2022.

08/26/2022, X-ray cervical spine four views, Greater Missouri Imaging, Matthew Ruyle, MD. Radiology Report. Alignment is anatomic. No fracture or listhesis. **No prevertebral swelling**. Minimal disc height loss at C3-4 and C4-5 with anterior/posterior spurring. Oblique views show bilateral C3-4 and C4-5 foraminal stenosis due to endplate spurring. Flexion/extension views show no instability. Normal motion at all segments.

08/26/2022, X-ray lumbar spine five views, Greater Missouri Imaging, Matthew Ruyle, MD. Radiology Report. Impression: Facet arthropathy L4-5 and L5-S1. L3-4 disc height loss and anterior spurring L3 to S1.
(All of these findings referable to the cervical and lumbar spine are consistent with longstanding degenerative changes, including the MRI findings as reported by Dr. Ruyle.)

09/14/2022, William Reed, MD, Gateway Spine & Joint. Patient in MVA on 07/25/2022. "This gentleman was a driver when he was T-boned on the driver side. He was restrained. No airbags deployed. No ambulance at the scene." Self-transported in his drivable vehicle to the emergency room. He is now suffering with right shoulder and neck pain, which is exquisite. Physical Examination: Cervical ROM limited in all directions by 50%. Upper extremity motor and sensory reveal global weakness to the right arm. Numbness is present in the upper shoulder over C3 and C4 nerve root distributions. Lumbar spine flexion and hyperextension limited by 50%. Radiographic Studies: HNP noted at C3-4 and C4-5. C3-4 signal changes within the spinal cord are of great concern. C4-5 complete loss of the spinal reserve capacity with compression and deformity of the cord. My review of the lumbar MRI reveals DDD with maintenance of the intervertebral disc heights at L3-4, L4-5, and L5-S1. Plan: Patient is submitted for DEXA scan. If favorable, cervical total disc replacement arthroplasty with relief of the spinal cord compression is strongly and urgently recommended. Once he has recovered from this, we will see to what degree it ameliorates his lumbar spine symptoms. If not, lumbar epidural steroid injection will be employed to treat the foraminal stenosis.

<u>Daniel Brunkhorst, DC, DB Health Services LLC, Chiropractic Notes</u>

07/28/2022, Initial Evaluation.

Followups on 08/01/2022, 08/03/2022, 08/08/2022, 08/11/2022, 08/15/2022, 08/17/2022, 08/22/2022, 08/29/2022, 08/31/2022, 09/06/2022, 09/12/2022, 09/19/2022, 09/21/2022, 10/03/2022, 10/05/2022, 10/10/2022, 10/12/2022, 10/17/2022, 10/24/2022, 10/26/2022, 10/31/2022, 11/02/2022, 11/07/2022, 11/09/2022. It is to be noted that all of the notes

are almost identical reprints of the previous indicating, "Kirt Bennett presents with the following complaint headache pain. Kirt describes the pain as aching and intermittent. The patient states that physiotherapy and TENS unit help to alleviate the pain. The patient states that the relief will last approximately one or two hours post treatment. The patient states that complete normal activities of daily living and physical activity will make the pain increase. *[sic]*"

By these reports, there has been no relief of the claimant's symptoms despite the multiple chiropractic treatments. He continued to complain of cervical and thoracic spine pain that was tight, frequent, aching sore, and stiff and lumbar pain that was aching, sore, tight and occasional. It does not seem that there has been any significant or lasting relief over more than three months of continued chiropractic treatments.

RADIOLOGY

In addition to the medical records I just cited, I have also received a CD containing the x-rays and MRIs of the claimant's cervical and lumbar spine.

08/05/2022, MRI cervical spine, Greater Missouri Imaging. The T2 sagittal imagery confirms the congenital spinal stenosis. The mid portion of the C3 body, which by convention is the point at which we measure the spinal canal, is approximately 9 mm. the MRI shows a chronic compression abnormalities of C3 and C4 as well as C5. These are all noted by sclerosis of the endplates at each of the levels. There is also thickened PLL throughout but no sign of OPLL. There is approximately a 1 mm bulge at C3-4 and approximately a 1.5 mm bulge at C4-5. There is a suggestion of myelomalacia, which is a common finding in a 56-year-old with congenital spinal stenosis and acquired degenerative changes. All of the posterior ligamentous structures such as the supraspinous and intraspinous ligaments reveal no acute signal change, which rules out soft tissue injury. The facet capsules, likewise, are all free of any acute signal abnormalities ruling out any facet capsule disruption. The prevertebral soft tissues are free of any signal changes and conform with the findings as I have reported of the cervical x-ray. There is no sign of acuity in this MRI. The craniocervical junction is preserved as well. There is facet arthropathy that is notable and best seen on the T1 imagery. This would also account for the myelomalacia that we see at that level. The absence of any acute signal in all of the structures described confirms that this is gliosis and not a cord contusion. The axial images reveal a 1 mm broad-based bulge at C3-4. The central canal, lateral recesses, and the foramina are all patent. I see no evidence of the herniated and extruded fragments that are contained in the report. Specifically, the report mentions PD cube CD image 39, which should contain a 5.5 mm extruded fragment on the right. I do not see such pathology nor do I see on the PD cube image 61 the extruded disc material. I do agree that at C3-4 there is a degree of cord flattening as a direct consequence of the chronic bulge and congenital spinal stenosis, both of which are

longstanding and clearly congenital from birth. The bulge is the acquired degeneration. C4-5 reveals another broad-based bulge and, along with the congenital spinal stenosis, this is causing cord flattening. At the apex of this bulge is where the gliosis is best visualized. This would indicate that this is a longstanding pathology that has put pressure on the cord at that level. This is not an acute finding. The foramina are compromised on both sides by the significant facet arthropathy and hypertrophy as well as uncovertebral hypertrophy, all of which contribute to the usual foraminal stenosis. This would be consistent with his 56 years of age at the time of this study. These findings are common and are actually normal, indicating that they are present in more than two-thirds of an asymptomatic population as stressed in the neurosurgical and spinal literature. C5-6 reveals perhaps at best a 1 mm bulge on no clinically significance. C6-7 and C7-T1 are normal.

08/05/2022, MRI lumbar spine, Greater Missouri Imaging. The T2 sagittal images reveal normal lumbar lordosis of approximately 60 degrees. The most cephalad disc levels of T12-L1, L1-2, and L2-3 are all completely normal in terms of height, hydration, and morphology. The canal is patent and there is a degree of congenital spinal stenosis, milder in its severity in the lumbar spine when compared to the cervical spine. The usual degenerative changes are noted at L3-4, L4-5, and L5-S1, and these include mild disc desiccation and mild bulges. There is an obvious annular fissure with a high-intensity zone seen centrally. All of these are best seen on the 7/15 T2 sagittal imagery. There are varying degrees of facet arthropathy, which are expected at this age, along with ligamentous thickening, most notable at L3-4, L4-5, and L5-S1, and there is a mild degree of central stenosis. Bone spurs from the hypertrophied superior articular processes are causing foraminal stenosis of a notable degree bilaterally at L3-4, L4-5, and L5-S1 as well. Looking specifically at the L3-4 level under great magnification, there is a broad-based bulge and there are multiple annular fissures. I see, however, no extruded disc fragment that would cause severe left foraminal stenosis. L4-5 reveals another broad-based disc bulge with thickening of the ligamentum flavum and facet arthropathy that contributes to the foraminal stenosis. However, I see no extruded fragment or HNP. These are all the result of the facet hypertrophy, disc bulge, and ligamentous thickening. L5-S1 reveals similar, if not identical, findings to the above three. The annular fissure is clearly seen in the central region. The traversing S1 nerve roots are unaffected without any obvious compression. The L5 nerve roots, which exit at those levels, do so without any nerve impingement or compression. The canal is mildly decreased. All of the findings are normal and expected in the age-matched cohorts of 56 years. Again, I see no soft tissue signs indicating acuity as I review the T1, T2, and fat suppression, otherwise known as STIR. This would include the supraspinous and intraspinous ligaments, the ALL, and PLL, all of which are free of acute signals. The facet capsules, which are best seen on the axials and far lateral sagittals, are also free of any acute signal changes. All of this confirms the chronicity of the findings at L3-4, L4-5, and L5-S1.

08/26/2022, X-ray cervical spine, Greater Missouri Imaging. Sagittal image. The vertebrae are adequately visualized from the C1 through the caudal endplate of C7. The spine is in lordosis of approximately 10-15 degrees. There is notable age-related compression of C4 and C5 with large ventral osteophytes projecting off the inferior of the caudal endplate of C4. There is ossification within the ALL at the C4-5 disc space. There is also chronic compression of the superior endplate of C5 to go along with the chronic compression and sclerosis on the inferior endplate of C4. Most importantly, however, the soft tissue shadows in front of C3 measure 5.35 mm, well within normal limits. At C7, it is 15 mm. These are both within their normal and respective limits of 7 mm and 21 mm. I see no fractures or listheses and the normal measurement at C3 from the posterior aspect of the body to the spinal laminar line suggests a degree of congenital narrowing. Flexion/extension views in the lateral projection reveal no abnormalities motion. The AP image is unremarkable. There appears to be some uncovertebral hypertrophy at the C3, C4, and C5 levels.

08/26/2022, X-ray lumbar spine, Greater Missouri Imaging. Excellent quality study. There is normal coronal and sagittal alignment. There are no acute or chronic compression abnormalities. There is no slip at either L4 or L5 of an acquired nature or of a longstanding condition at L5-S1 referred to as an isthmic spondylolisthesis. These are all negative. There are mild spurs seen at L3-4, L4-5, and L5-S1 with facet arthropathy seen at all three levels of L3-4, L4-5, and L5-S1. These findings are also considered normal and expected in this age range. I see no degree of acuity.

DISCUSSION

My review of the cervical and lumbar x-rays and MRIs reveal that these are appropriate age-related changes that have been widely reported in the medical literature, which includes both neurosurgery and orthopedic surgery, and in line with the nomenclature and classification of lumbar disc pathology consensus published by the collaborative efforts of the North American Spine Society (NASS), the American Society of Spine Radiology (ASSR), and the American Society of Neuroradiology (ASNR), which has guided radiologists and clinicians and has passed the test of time. Responding to this initiative, a task force of spine physicians has reviewed and recently updated the original 1.0 version in 2001 with the more current version of 2.0, published in the journal, *Spine*, 2014; 39(24) 1448-1465. They noted in their most recent 2.0 version, "Degenerative changes in the discs are included in a broad category that includes the subcategories annular fissure, degeneration, and herniation." They provided extensive definitions of each of those three terms. They went on to state that use of the term "tear" can be misunderstood because the analogy to other tears has a connotation of injury, which is inappropriate in this context. The term "fissure" is the correct term. Use of the term "tear" should be discouraged and when it appears should be recognized that it usually is meant to be synonymous with fissure and not reflective of the result of injury. The original version of

this document (1.0) stated preference for the term "fissure" but regarded the two items as almost synonymous. However, in the most recent revision of 2.0 we regard the term "tear" as nonstandard usage. They went on to describe other degenerative changes, which can include any or all of the following: desiccation, fibrosis, narrowing of the disc space, diffuse bulging of the annulus beyond the disc space, fissuring (i.e. annular fissures), mucinous degeneration of the annulus, intradiscal gas, osteophytes of the ventral apophyses, defects, inflammatory changes, and sclerosis of the endplates. The point that the combined task forces was trying to emphasize is that injury should not be conflated with degeneration. This current nomenclature, as contained in Lumbar Disc Nomenclature: Version 2.0, published in 2014, has been formally endorsed by the three boards that contributed to the publication.

My review of the medical records reveals several inconsistencies among the various providers. My review of the diagnostic studies indicates a clear lack of acuity and the presence of normal and expected age-related degenerative changes. I can formally state, therefore, within a reasonable degree of medical certainty, based upon my education, training, and experience as board-certified orthopedic surgeon fellowship trained in spinal surgery, there was no injury of any significance to the claimant's cervical spine or lumbar spine which would require any injections let alone surgery. The absence of any soft tissue changes on the MRIs indicate that the claimant may have sustained a minor soft tissue strain or sprain.

Donald A. deGrange, MD
DAD/sls